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**PATENT** 

Docket No: CX03022USU (04CXT0006D)

Serial No.: 10/751,013

REMARKS

STATUS SUMMARY

Claims 1-13 and 15-31 are pending in the present application. Claims 1-3, 5-7, 10-13,

16-19, and 22-24, 26-28, and 30 are rejected. Claims 4, 8, 9, 15, 20, 21, 25, 29, and 31 are

objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening claims.

In this paper, applicant has amended claim 1, canceled claim 3 without prejudice, and traversed

the rejections under 35 U.S.C. §§ 102(e) 103(a).

Applicant has considered the above-identified Office Action and cited references, and

replies as set forth below to place the application in condition for allowance.

**CLAIM OBJECTIONS** 

The Examiner noted that the present application as filed contained three claims not

numbered consecutively and indicated that misnumbered claims 25-27 have been renumbered

29-31. Applicant thanks the Examiner for calling attention to this oversight, and has amended

claims 29-31 in the submitted claims listing to reflect this renumbering.

CLAIM REJECTIONS - 35 U.S.C. § 102(e)

Claims 1-3, 7, 12-13, 18, 19, and 22 are rejected under 35 U.S.C. § 102(e) as being

anticipated by U.S. Patent No. 7,043,206 to Herdey et al. ("Herdey"). Applicant respectfully

traverses this rejection in view of the discussion below.

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Claim 1, as amended, recites "an attenuator within the DC feedback correction servo-loop

capable of generating an attenuation coefficient  $k_{fb}$ ." The function of the attenuator is described

throughout the present application, and more specifically, some of the effects that may be

obtained by utilizing an attenuator where the attenuation coefficient  $k_{lb}$  is varied are described in

paragraphs [040] through [043], pages 13-14, of the specification, as well as how the attenuator

attenuation coefficient  $k_{fb}$  may be implemented in paragraphs [044] and [045], pages 14-15.

In the above-identified Office action as well as the prior non-Final Office action, the

Examiner has contended that "the filter 110 [of Herdey] reads on the attenuator as claimed

because the filter 110 attenuates the frequency components that are outside of its low pass band."

As stated in a previous response, applicant believes that Herdey teaches that its low-pass filter

110 functions merely to smooth out the signal outputted from the low-pass filter 110 to the

summing device 102, as is conventional for low-pass filters, and does not teach that this low-pass

filter 110 would function to reduce the effects of the forward gain of the baseband section in the

manner taught in the present application.

In response to the latter argument, the Examiner has stated that the feature of reducing the

effects of the forward gain of the baseband section is not recited in rejected claim 1. What is

recited in claim 1, as amended, however, is an attenuator with the capability to generate an

attenuation coefficient  $k_{fb}$ , and as described in the above-cited paragraphs of the specification,

this capability includes the feature of reducing the effects of the forward gain of the baseband

section as well as other features dependent on the attenuation coefficient  $k_{fb}$  selected. None of

this is taught or described in Herdey.

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Herdey, therefore, fails to teach or describe all of applicant's claim limitations in independent claim 1, as amended. Thus, independent claim 1 is also in condition for allowance.

Claims 2, 3 and 7 depend directly or indirectly from claim 1, and therefore are patentable for at least the same reasons as set forth above regarding claim 1.

Independent claim 12 recites "means for producing an attenuation coefficient  $k_{fb}$  within the DC feedback correction servo-loop." Therefore, claim 12 is patentable for at least the same reasons as set forth above regarding claim 1.

Claim 13 depends directly from claim 12, and therefore is patentable for at least the same reasons as set forth above regarding claim 12.

Independent claim 18 recites "attenuating the processed feedback signal with an attenuation coefficient  $k_{fb}$  to create an attenuated feedback signal." Claim 18 is therefore patentable for at least the same reasons as set forth above regarding claim 1.

Claims 19 and 22 depend directly or indirectly from claim 18, and therefore are patentable for at least the same reasons as set forth above regarding claim 18.

In view of the foregoing, applicant respectfully submits that claims 1-3, 7, 12-13, 18, 19, and 22 are patentable under 35 U.S.C. § 102(e) over Herdey. Therefore, applicant respectfully requests that this rejection be withdrawn.

## CLAIM REJECTIONS - 35 U.S.C. § 103(a)

Claims 5, 6, 16, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Herdey. Applicant respectfully traverses this rejection. Claims 5 and 6 depend indirectly from claim 1, and therefore are patentable for at least the same reasons as set forth above with regard

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to claim 1. Likewise, claims 16 and 17 depend indirectly from independent claim 12, and

therefore are patentable for at least the same reasons as set forth above with regard to claim 12.

In view of the foregoing, Applicant respectfully submits that claims 5, 6, 16 and 17 are

patentable 35 U.S.C. § 103(a) over Herdey. Therefore, applicant respectfully requests that this

rejection be withdrawn.

Claims 10 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over

Herdey in view of U.S. Patent No. 6,459,889 to Ruelke ("Ruelke"). Applicant respectfully

traverses this rejection. Claims 10 and 11 depend directly or indirectly from claim 1, and

therefore are patentable for at least the same reasons as set forth above with regard to claim 1.

Moreover, claims 10 and 11 each recite "a controller in signal communication with the baseband

section and the attenuator." Ruelke fails to teach or suggest such a controller. Referring to

Figure 1 of Ruelke, Ruelke's controller 162/168 is in signal communication with an amplifier

164/170 and not with an attenuator capable of generating an attenuation coefficient  $k_{fb}$ .

In view of the foregoing, applicant respectfully submits that claims 10 and 11 are

patentable under 35 U.S.C. § 103(a) over the combination of Herdey and Ruelke. Therefore,

applicant respectfully requests that this rejection be withdrawn.

AMENDMENTS TO SPECIFICATION

Several paragraphs of the specification have been amended in minor aspects to improve

clarity, correct typographical errors, etc. As an example, the references to a low-noise variable-

gain amplifier ("LN-VGA") were made consistent throughout the specification. Typographical

errors such as these were amended to make the specification consistent throughout.

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Support for these amendments is found throughout the specification as originally filed, and accordingly no new matter is believed to have been added. No new matter has been added by these Amendments.

## OTHER CLAIM AMENDMENTS

Applicant has canceled claim 3 without prejudice as being duplicative of its independent base claim 1, as amended. Applicant has amended claims 4, 10, and 25 to change their dependencies in view of the cancellation of claim 3.

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## **CONCLUSION**

In light of the above remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Office Action.

Respectfully submitted,

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